

Community preparedness for tsunami disaster: a case study

ABSTRACT

Purpose: The main objective of this study is to develop a tsunami emergency response plan for a coastal community by adopting a community-based disaster preparedness approach.

Design/methodology/approach: A multi-strategy research design utilizing both quantitative and qualitative methods was used. The weaknesses and strengths of the different agencies involved in responding to the 2004 tsunami disaster were identified through a focus group discussion. A survey was used to assess the preparedness of the community. Tsunami awareness and education were imparted through lectures, sermons, radio talk shows, informal briefings, workshops and printed materials. Tsunami evacuation routes, safe zones, warning protocols and evacuation plans were finalized through a consultation process with the community. A tsunami evacuation plan was verified during a table-top exercise and was tested through a drill.

Findings: It is evident from the study that a community-based approach (where the local community is taken as the primary focus of attention in disaster reduction) to tsunami mitigation and preparedness is viable. This process has provided an opportunity for tapping traditional organizational structures and mechanisms (including formal and informal community leaders) and capability-building activities with the community disaster committees and volunteers.

Originality/value: Tsunami 2004 is the first ever tsunami disaster experienced in the country and thus the study provides significant lessons learned from the event. The community-based approach to disaster preparedness is not the current practice in the country. Thus, the study demonstrates that the approach is a viable tool to enhance community preparedness to tsunami and other types of disasters as well.

Keyword: Tsunami; Emergency response; Disasters; Community preparedness; Evacuation routes; Malaysia